



# Introduction to Programming and Computer Science/Electronics

Lesson 50



# Javascript

## Operators - 1

---

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript Operators</h2>

<p>x = 5, y = 2, calculate z = x + y, and display z:</p>

<p id="demo"></p>

<script>
let x = 5;
let y = 2;
let z = x + y;
document.getElementById("demo").innerHTML = z;
</script>

</body>
</html>
```

# Javascript Operators - 2

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## JavaScript Arithmetic Operators

Arithmetic operators are used to perform arithmetic on numbers:

### Operator Description

- + Addition
- Subtraction
- \* Multiplication
- \*\* Exponentiation (ES2016)
- / Division
- % Modulus (Division Remainder)
- ++ Increment
- Decrement

# Javascript Strings - 1

---

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript Operators</h2>

<p>The + operator concatenates (adds) strings.</p>

<p id="demo"></p>

<script>
let text1 = "John";
let text2 = "Tan";
let text3 = text1 + " " + text2;
document.getElementById("demo").innerHTML = text3;
</script>

</body>
</html>
```

# Javascript Strings - 2

---

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript Operators</h2>

<p>The assignment operator += can concatenate strings.</p>

<p id="demo"></p>

<script>
let text1 = "What a very ";
text1 += "nice day";
document.getElementById("demo").innerHTML = text1;
</script>

</body>
</html>
```

# Javascript

## API - Forms - 1

---

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>JavaScript Validation</h2>
```

```
<p>Enter a number and click OK:</p>
```

```
<input id="id1" type="number" min="100" max="300" required>
```

```
<button onclick="myFunction()">OK</button>
```

```
<p>If the number is less than 100 or greater than 300, an error message will be displayed.</p>
```

```
<p id="demo"></p>
```

# Javascript

## API - Forms - 2

---

```
<script>
function myFunction() {
  const inpObj = document.getElementById("id1");
  if (!inpObj.checkValidity()) {
    document.getElementById("demo").innerHTML =
inpObj.validationMessage;
  } else {
    document.getElementById("demo").innerHTML = "Input OK";
  }
}
</script>

</body>
</html>
```



# Javascript

## API - Geolocation

---

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Geolocation API</h2>
<p>Click the button to get your coordinates.</p>
<button onclick="getLocation()">Try It</button>
<p id="demo"></p>
<script>
const x = document.getElementById("demo");
function getLocation() {
  if (navigator.geolocation) {
    navigator.geolocation.getCurrentPosition(showPosition);
  } else {
    x.innerHTML = "Geolocation is not supported by this browser.";
  }
}
function showPosition(position) {
  x.innerHTML = "Latitude: " + position.coords.latitude +
  "<br>Longitude: " + position.coords.longitude;
}
</script>

</body>
</html>
```

